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10/674,623	09/30/2003	Bobbie Kaye Whitenton Baylis	2002P16242US01;60,427-605	4194

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EXAMINER

GARCIA, ERNESTO

ART UNIT PAPER NUMBER

3679

DATE MAILED: 12/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/674,623

Applicant(s)

BAYLIS ET AL.

Examiner

Ernesto Garcia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 2,3,5-8 and 14-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4 and 9-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Restriction*

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-13, drawn to an air induction component assembly and its laser weld joint, classified in class 403, subclass 270.
  - II. Claims 14-20, drawn to a method for joining a first induction component portion to a second induction component portion in an air induction system, classified in class 156, subclass 272.8.
  
2. The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the product as claimed can be made by another and materially different process, such as forming the joint through ultrasonic bonding.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Kerrie Laba on 4/21/05, a provisional election was made with oral traverse to prosecute the invention of Group I, claims 1-13. Affirmation of this election must be made by applicants in replying to this Office action. Claims 14-20 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicants are reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

### ***Drawings***

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: "A1", "A2", and "A3" shown in Figure 2A.

The drawings are objected to because the cross-hatching of the first shell in Figures 1-5 is not correct for transparent material. See MPEP 608.02(IX).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended". If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the

patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

### ***Claim Objections***

Claims 4, 8, 10 and 13 are objected to because of the following informalities:

regarding claim 4, "components" in line 3 should be --component portions--;

regarding claim 8, the limitation "for said first tapered weld surface being at least fourteen degrees and said weld taper angle for said second tapered weld surface being at least twelve degrees" in lines 2-3 appears grammatically incorrect;

regarding claim 10, --the-- needs to be inserted after "wherein" in line 2; and,

regarding claim 13, "at least one of" in line 1 needs to be deleted as the claim is written in the alternative by using "or" in line 2. Appropriate correction is required. For

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purposes of examining the instant invention, the examiner has assumed these corrections have been made.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Lohr, 6,267,093.

Regarding claim 1, Lohr discloses, in Figure 4, a laser weld comprising a first component portion **11** and a second component portion **12**. The first component portion **11** defines a first laser weld surface **A2** and includes a first taper surface **18** opposite from the first laser weld surface **A2**. The second component portion **12** defines a second laser weld surface **A5** and includes a second taper surface **20**

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opposite from the second laser weld surface **A5**. The first taper surface **18** and the second taper surface **20** cooperate with each other.

Regarding claim 2, the first component portion **11** comprises an upper shell; the second component portion **12** comprises a lower shell. The upper shell **11** and the lower shell **12** together form an air induction component.

Regarding claim 5, the first taper surface or the second taper surface defines a taper angle of at least thirty degrees.

Claims 1, 4, and 6-9 are rejected under 35 U.S.C. 102(b) as being anticipated by the Japanese patent, JP-2001-105500.

Regarding claim 1, the Japanese patent discloses, in Figure 6, a laser weld comprising a first component portion **11a** and a second component portion **12a**. The first component portion **11** defines a first laser weld surface **11d3** and includes a first taper surface **11d2** opposite from the first laser weld surface **11d3**. The second component portion **12a** defines a second laser weld surface **12d3** and includes a second taper surface **12d2** opposite from the second laser weld surface **12d3**. The first taper surface **11d2** and the second taper surface **12d2** cooperate with each other.



Regarding claim 4, the first component portion **11a** or the second component portion **12a** is comprised of a laser-transparent material and the other of the first component portion **11a** and second component portion **12a** is comprised of an absorbing material.

Regarding claim 6, the first laser weld surface **11d3** comprises a first tapered weld surface and the second laser weld surface **12d3** comprises a second tapered weld surface. The first and second taper surfaces lock the first and second tapered weld surfaces together and maintain a predetermined pressure.

Regarding claim 7, the first and second tapered weld surfaces define weld taper angles that are different from each other. The first and second taper surfaces define a taper angle that is at least twice that of the weld taper angles for both the first and second tapered weld surfaces.

Regarding claim 8, the taper angle is at least thirty-six degrees. The first tapered weld surface is at least fourteen degrees. The weld taper angle of the second tapered weld surface is at least twelve degrees.

Regarding claim 9, the Japanese patent discloses, in Figure 6, an air induction component comprising a first shell **11a**, a second shell **12a**, and a laser weld joint area. The first shell **11a** is made from a laser-transparent material defining a first weld surface

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**11d3** and including a first taper locking surface **11d2** opposite from the first weld surface **11d3**. The second shell **12a** is made from an absorbing material defining a second laser weld surface **12d3** and including a second taper locking surface **12d2** opposite from the second laser weld surface **12d3**. The laser weld joint area is formed at the first and second laser weld surfaces **12d3**. The first taper locking surface **11d2** and the second taper locking surface **12d2** cooperate with each other to lock the first and second laser weld surfaces **12d3** into abutting engagement at a predetermined pressure during a laser welding process.

Claims 1, 4, and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Akiyama et al., 6,478,451 (see marked-up attachment).

Regarding claim 1, Akiyama et al. disclose, in Figure 6, a first component portion **16** and a second component portion **14**. The first component portion **16** defines a first laser weld surface **A2** and includes a first taper surface **A3** opposite from the first laser weld surface **A2**. The second component portion **14** defines a second laser weld surface **A5** and includes a second taper surface **A6** opposite from the second laser weld surface **A5**. The first taper surface **A3** and the second taper surface **A6** cooperate with each other.

Regarding claim 4, the first component portion **16** or the second component portion **14** is comprised of a laser-transparent material and the other of the first

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component portion **16** and second component portion **14** is comprised of an absorbing material.

Regarding claim 9, Akiyama et al. disclose, in Figure 6, a first shell **11**, a second shell **12**, and a laser weld joint area **A13**. The first shell **11** is made from a laser-transparent material defining a first weld surface **A2** and including a first taper locking surface **A9** opposite from the first weld surface **A2**. The second shell **12** is made from an absorbing material defining a second laser weld **A5** surface and including a second taper locking surface **A12** opposite from the second laser weld surface **A5**. The laser weld joint area **A13** is formed at the first and second laser weld **A5** surface. The first taper locking surface **A9** and the second taper locking surface **A12** cooperate with each other.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Japanese patent, JP-2001-105500, in view of Akiyama et al., 6,478,451.

Regarding claims 3 and 10, the Japanese patent fails to disclose a predetermined pressure is applied. Applicant is reminded that the method of forming the device is not germane to the issue of patentability of the device itself. Therefore, this limitation has been given limited patentable weight. See MPEP ' 2113. Akiyama teaches, in column 3, lines 7, a predetermined pressure but does not specify the pressure being at least 190 pounds per square inch. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a pressure as part of preventing bonding failure. Applicants should note that discovering an optimum value of a result effective variable involves only routine skill in the art. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the pressure at least 190psi. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Regarding claim 11, the first tapered weld **11d3** surface comprises a first tapered weld surface **11d3** defining a first angle and the second laser weld surface **12d3** comprises a second laser weld surface **12d3** defining a second angle different than the first angle.

Regarding claim 12, applicants are reminded that the method of forming the device is not germane to the issue of patentability of the device itself. Therefore, this limitation has been given limited patentable weight. See MPEP ' 2113. Therefore, a

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laser beam is applied generally perpendicular to at least one of the first tapered weld **11d3** surface and the second laser weld **12d3** surface.

Regarding claim 13, the first taper locking surface **11d2** or the second taper locking surface **12d2** defines a taper angle that is at least twice that of both the first and the second angle.

Claims 3 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akiyama et al., 6,478,451.

Regarding claims 3 and 10, a predetermined pressure is at least 190 psi. Akiyama discloses, in column 3, lines 7, a predetermined pressure but does not specify the pressure being at least 190 pounds per square inch. Applicants should note that discovering an optimum value of a result effective variable involves only routine skill in the art. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the pressure at least 190psi. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernesto Garcia whose telephone number is 571-272-

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7083. The examiner can normally be reached from 9:30-5:30. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached at 571-272-7087.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*g.g.*

E.G.

November 28, 2005

Attachments: one marked-up page of Lohr, 6,267,093; and,  
one marked-up page of Akiyama et al., 6,592,239.



DANIEL P. STODOLA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600

Lohr, 6,267,093



